

20
Jan 05

A L E R T P E R I O D S The International Space Environment Service

JANUARY 2005

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location		Flares			Date of Fcst	Region Fcst(1)	Geoadvice(1)
							Lat	Lon	Opt	M	X			
001	01	31	60	99	9	10715	N04	E34	4	1	0	01	A	SOL: Major
						10716	S14	E37	0	0	0	01	A	MAG: Quiet
						10717	N07	W56	0	0	0	01	A	PRO: Warning
002	02	01	51	99	15	10715	N05	E21	0	0	1	02	E	SOL: Active
						10716	S14	E24	0	0	0	02	Q	MAG: Active
						10717	N07	W73	1	0	0	02	Q	PRO: Quiet
003	03	02	52	100	30	10715	N05	E08	0	0	0	03	Q	SOL: Eruptive
						10716	S13	E11	0	0	0	03	Q	MAG: Minor
						10717	N08	W86	0	0	0	03	Q	PRO: Quiet
004	04	03	43	94	20	10715	N04	W04	1	0	0	04	E	SOL: Eruptive
						10716	S13	W01	0	0	0	04	Q	MAG: Active
									0	0	0	04		PRO: Quiet
005	05	04	30	88	20	10715	N05	W19	3	0	0	05	Q	SOL: Eruptive
						10716	S13	W16	0	0	0	05	Q	MAG: Active
									0	0	0	05		PRO: Quiet
006	06	05	15	88	18	10715	N04	W33	0	0	0	06	Q	SOL: Quiet
									0	0	0	06		MAG: Quiet
									0	0	0	06		PRO: Quiet
007	07	06	14	83	2	10715	N04	W46	0	0	0	07	Q	SOL: Quiet
									0	0	0	07		MAG: Active
									0	0	0	07		PRO: Quiet
008	08	07	22	84	40	10715	N06	W59	0	0	0	08	Q	SOL: Quiet
						10718	S09	E78	0	0	0	08	Q	MAG: Major
									0	0	0	08		PRO: Quiet
009	09	08	34	89	20	10715	N08	W69	0	0	0	09	Q	SOL: Eruptive
						10718	S08	E67	0	0	0	09	Q	MAG: Active
						10719	S09	E82	0	0	0	09	Q	PRO: Quiet
010	10	09	28	88	4	10718	S08	E54	0	0	0	10	Q	SOL: Eruptive
						10719	S08	E64	2	1	0	10	Q	MAG: Quiet
									0	0	0	10		PRO: Quiet
011	11	10	40	90	6	10718	S08	E44	0	0	0	11	Q	SOL: Quiet
						10719	S10	E52	0	0	0	11	Q	MAG: Quiet
						10720	N09	E65	0	0	0	11	Q	PRO: Quiet
012	12	11	25	94	13	10718	S06	E32	0	0	0	12	Q	SOL: Eruptive
						10720	N13	E52	0	0	0	12	Q	MAG: Active
									0	0	0	12		PRO: Quiet
013	13	12	58	102	24	10718	S07	E19	0	0	0	13	Q	SOL: Eruptive
						10720	N13	E37	2	0	0	13	E	MAG: Active
									0	0	0	13		PRO: Quiet
014	14	13	77	116	13	10718	S07	E07	5	0	0	14	E	SOL: Active
						10720	N13	E24	0	0	0	14	E	MAG: Quiet
									0	0	0	14		PRO: Quiet
015	15	14	65	130	12	10718	S05	W06	1	1	0	15	E	SOL: Active
						10720	N13	E10	8	2	0	15	E	MAG: Active
									0	0	0	15		PRO: Quiet
016	16	15	100	145	19	10718	S07	W21	4	1	0	16	E	SOL: Active
						10720	N31	E40	23	5	2	16	Q	MAG: Severe
									0	0	0	16		PRO: Proton
017	17	16	99	145	12	10718	S07	W34	0	0	0	17	E	SOL: Proton
						10720	N13	W15	8	1	0	17	P	MAG: Major
						10721	S03	E14	0	0	0	17	Q	PRO: IP

21
Jan 05

A L E R T P E R I O D S The International Space Environment Service

JANUARY 2005

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location		Flares			Date of Fcst	Region Fcst(1)	Geoadvice(1)
							Lat	Lon	Opt	M	X			
						10722	N19	E04	0	0	0	17	Q	
018	18	17	107	138	46	10718	S07	W47	0	0	0	18	E	SOL: Proton
						10720	N13	W30	6	1	1	18	P	MAG: Major
						10721	S03	E02	0	0	0	18	Q	PRO: IP
						10723	N06	E77	0	0	0	18	Q	
019	19	18	109	124	52	10718	S07	W64	0	0	0	19	Q	SOL: Major
						10720	N13	W44	9	2	0	19	P	MAG: Major
						10722	N19	W25	0	0	0	19	Q	PRO: IP
						10723	N07	E63	0	0	0	19	Q	
						10724	S12	W07	0	0	0	19	Q	
020	20	19	66	133	47	10718	S06	W76	0	0	0	20	Q	SOL: Major
						10720	N14	W56	7	3	1	20	P	MAG: Major
						10723	N06	E52	1	0	0	20	Q	PRO: IP
021	21	20	61	123	11	10718	S07	W88	0	0	0	21	Q	SOL: Major
						10720	N14	W70	5	0	1	21	P	MAG: Active
						10723	N06	E35	0	0	0	21	Q	PRO: IP
022	22	21	69	114	47	10720	N13	W83	2	1	0	22	P	SOL: Active
						10723	N06	E22	0	0	0	22	A	MAG: Minor
						10725	S04	W36	0	0	0	22	A	PRO: IP
						10726	S02	E27	0	0	0	22	A	
023	23	22	60	102	22	10720	N11	W93	0	0	0	23	E	SOL: Eruptive
						10723	N07	E07	0	0	0	23	Q	MAG: Active
						10725	S04	W49	0	0	0	23	E	PRO: Quiet
						10726	S01	E14	0	0	0	23	Q	
024	24	23	40	96	17	10723	N06	W04	0	0	0	24	Q	SOL: Eruptive
						10725	S03	W64	0	0	0	24	Q	MAG: Active
						10726	S01	W02	0	0	0	24	Q	PRO: Quiet
025	25	24	42	95	6	10723	N06	W17	0	0	0	25	Q	SOL: Eruptive
						10725	S03	W77	0	0	0	25	Q	MAG: Active
						10727	S09	E38	0	0	0	25	Q	PRO: Quiet
026	26	25	56	94	6	10723	N06	W30	0	0	0	26	Q	SOL: Quiet
						10725	S03	W90	0	0	0	26	Q	MAG: Quiet
						10727	S09	E25	0	0	0	26	Q	PRO: Quiet
						10728	S14	E66	0	0	0	26	Q	
027	27	26	46	89	3	10723	N06	W44	0	0	0	27	Q	SOL: Quiet
						10727	S09	E11	0	0	0	27	Q	MAG: Quiet
						10728	S14	E53	0	0	0	27	Q	PRO: Quiet
028	28	27	43	87	5	10723	N06	W57	0	0	0	28	Q	SOL: Quiet
						10727	S09	W02	0	0	0	28	Q	MAG: Quiet
						10728	S14	E36	0	0	0	28	Q	PRO: Quiet
029	29	28	43	85	6	10723	N05	W70	0	0	0	29	Q	SOL: Quiet
						10727	S05	W16	0	0	0	29	Q	MAG: Active
						10728	S14	E24	0	0	0	29	Q	PRO: Quiet
030	30	29	30	86	20	10723	N06	W84	0	0	0	30	Q	SOL: Quiet
						10727	S10	W26	0	0	0	30	Q	MAG: Active
									0	0	0	30		PRO: Quiet
031	31	30	38	86	10	10727	S09	W42	0	0	0	31	Q	SOL: Quiet
						10728	S13	E01	0	0	0	31	Q	MAG: Active
									0	0	0	31		PRO: Quiet

(1) Region Forecast and Flare (SOL) Advice
 Q = Quiet (<50% probability of C-class flares)
 E = Eruptive (C-class flares expected, probability >=50%)

22
Jan 05

A L E R T P E R I O D S
The International Space Environment Service

JANUARY 2005

A = Active (M-class flares expected, probability $\geq 50\%$)
M = Major (X-class flares expected, probability $\geq 50\%$)
P = Proton (Proton flares expected, probability $\geq 50\%$)
W = Warning (activity levels are expected to increase, but no numerical forecast given)
/ = No forecast available

Magnetic (MAG) Geoadvice

'Quiet'
'Active' conditions expected (A \geq 20 or K =4)
'Minor' storm expected (A \geq 30 or K =5)
'Major' storm expected (A \geq 50 or K \geq 6)
'Severe' storm expected (A \geq 100 or K \geq 7)
'IP' magstorm in progress (A \geq 30 or K \geq 4)
'Warning' (activity levels are expected to increase, but no numerical forecast given)
'/' no forecast available

Proton (PRO) Geoadvice

'Quiet'
'Proton' event expected (10pfu at > 10 MeV)
'Major' proton event expected (100pfu at >100 MeV)
'IP' proton event in progress (>10 MeV)
'Warning' (activity levels are expected to increase, but no numerical forecast given)
'/' no forecast available

STRATWARM ALERTS
Termination of the STRATALERT Reports
Stratospheric Research Group, FU Berlin

In the 1960s the stratospheric midwinter warmings were regarded as an exciting and interesting research problem. The observations taken during a warming were scarce but in great demand, and a much desired aim was to launch meteorological rockets when a warming was developing above a station. For this purpose an advisory system was necessary, such as had been established in the international geophysical community for other phenomena, the so-called GEOALERT. Charged by WMO (World Meteorological Organisation) the Stratospheric Research Group of the Freie Universität in Berlin got together with their colleagues of the American Weather Bureau and developed a warning system which was named STRATALERT. It was introduced in 1964 when the IQSY (International Year of the Quiet Sun) began (cf. ALERTING CRITERIA for more information).

The Berlin group was at first responsible for the European space, later for the whole Northern Hemisphere, and issued a STRATALERT report every day during winter, and when needed also a GEOALERT. The alerts were disseminated through the German Weather Service's international net and reached all interested parties everywhere. The STRATALERT reports were an essential source of information about what was going on in the stratosphere, information which at that time would not otherwise have been available to many scientists interested in current conditions. Because of this information it was possible to time experiments, for instance with meteorological rockets, to take place under desired conditions, and local observations could be fitted into and interpreted on the background of a wider field. This information system has served as a basis for decisions made in many large-scale field experiments. A review and classification of stratospheric warmings can be found in SPARC Newsletter No. 15, (Labitzke and Naujokat, 2000, updated table 1).

The winter, 2003/2004, was the last STRATALERT winter. After 41 years we are sorry to announce that we cannot continue this timely warning system in its old format and we could not find a successor. For those who are interested in STRATALERT messages, we provide access to all available messages via ftp:
<ftp://strat50.met.fu-berlin.de/pub/stratalert>

Those interested in the daily development of the stratospheric circulation can find some analyses and different stratospheric parameters based on the ECMWF-data here:
<http://strat-www.met.fu-berlin.de/cgi-bin/winterdiagnostics>.
The general evaluation is, however, left to the user.

Additional data links are (amongst others) available:

US National Centers for Environmental Prediction (CPC/NCEP):
<http://www.cpc.ncep.noaa.gov/products/stratosphere>

Japan Meteorological Agency (JMA):
<http://okdk.kishou.go.jp/products/clisys/STRAT>